

## **DIRECTIONAL ENHANCEMENT/RANGE EXTENDING DEVICES**

### **Abstract of the Disclosure**

An accessory is provided for use with an existing antenna on a wireless device to improve directionality and/or signal strength. The accessory includes a conductive surface that is coupled to the existing antenna using a clip disposed on an arm that supports the reflector. The conductive surface is disposed at a quarter wavelength spacing from the existing antenna. Alternatively, the reflective surface may be made sufficiently large to reflect received wireless signals in regard to a plurality of existing antennas that are spaced apart, e.g., internal and external antennas. The reflector can optionally be curved to achieve a desired directional characteristic for the wireless signals reflected by the accessory. Also, a director can be included on the accessory to provide improved gain and directionality for the wireless signals, relative to the existing antenna system.